

IWG-2/006(Rev.1) April 8, 2004 Author: Steve Baruch

UNITED STATES PRELIMINARY VIEWS ON WRC-07

WRC-07 Agenda Item 1.8 (Res. 122 (Rev.WRC-03) only): to consider the results of ITU-R studies on technical sharing and regulatory provisions for the application of high altitude platform stations operating in the bands 27.5-28.35 GHz and 31-31.3 GHz in response to Resolution 145 (WRC-03), and for high altitude platform stations operating in the bands 47.2-47.5 GHz and 47.9-48.2 GHz in response to Resolution 122 (Rev.WRC-03);

ISSUE: Matters related to the use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz by high altitude platform stations (HAPS) in the fixed service and by systems and networks in the fixed-satellite service (FSS).

BACKGROUND: The ITU has been considering the implications of HAPS in the fixed service in the 47.2-47.5 GHz and 47.9-48.2 GHz band since 1997, when WRC-97 first made provision for the operation of HAPS within the fixed service. Studies have been ongoing under versions of Resolution 122 since WRC-97.

In the WRC-2000 revision to Resolution 122, the ITU-R was requested to complete sharing studies between the FSS and HAPS operations in the fixed service. Following WRC-2000, Recommendation ITU-R SF.1481 was developed and adopted. This recommendation makes clear that co-frequency operations between HAPS in the fixed service and FSS networks and systems is feasible in the 47.2-47.5 GHz and 47.9-48.2 GHz bands (even though it was noted that "there may be a need to develop the maximum allowable power flux-density at satellites on the GSO due to aggregate interference caused by ground user terminals of high altitude platform networks").

In the revision to Resolution 122 approved at WRC-03, co-existence between HAPS in the FS and the FSS at 47.2-47.5 GHz and 47.9-48.2 GHz was presumed feasible, as administrations were encouraged to facilitate interservice coordination. The ITU-R was invited to study power limitations on HAPS ground stations to facilitate sharing with space station receivers, regulatory provisions to address deployment of HAPS in the FS near country borders, and technical sharing criteria between HAPS in the FS and both radio astronomy and FSS systems (taking into account the operational environments and the requirements of FSS systems). WRC-03 decided, after much debate, to retain the prior limitation on notices for new FSS networks – but only in Regions 1 and 3. WRC-03 also decided to maintain indefinitely notices for HAPS that were received by the BR prior to 22 November 1997.

U.S. VIEW:

1. The U.S. will participate in studies on the power limitations to be applied to HAPS ground stations to protect space station receivers.

2. The U.S. believes, as it did at WRC-03, that the question of the feasibility of co-frequency operation between HAPS in the FS and the FSS at 47.2-47.5 GHz and 47.9-48.2 GHz has been answered in the affirmative. With that, there no longer is any need for Resolution 122, the restrictions it perpetuates on FSS notices in Region 1 and 3, or the limitless privileges it extends to HAPS notices. Resolution 122 should be suppressed.